

WHAT IS CLAIMED IS:

1. A method of generating electrical energy from a subject's body comprising:
sensing pulsations of a part of the subject's cardiovascular system;
and converting said pulsations into electrical energy.
2. The method according to Claim 1, wherein said pulsations of the part of the subject's cardiovascular system are converted into electrical energy by utilizing said pulsations to pump a liquid with respect to an electrical coil to generate an electrical voltage in said coil.
3. The method according to Claim 2, wherein said liquid is a magnetic liquid.
4. The method according to Claim 2, wherein said liquid is pumped in one direction through a closed-loop path enclosed by said electrical coil.
5. The method according to Claim 4, wherein said closed-loop path is at least partly defined by a displaceable member mechanically coupled to said part of the subject's cardiovascular system so as to be cyclically displaced by said pulsations of said part of the subject's cardiovascular system.
6. The method according to Claim 5, wherein said closed loop path is an annular chamber defined by an outer, circular, stiff wall, and an inner, circular, flexible wall, constituting said displaceable member and mechanically coupled to said part of the subject's cardiovascular system by one or more loops encircling both said part of the subject's cardiovascular system and said inner, circular, flexible wall.
7. The method according to Claim 6, wherein said annular chamber includes one or more one-way valves which permit liquid flow only in one direction around said annular chamber.

8. The method according to Claim 1, wherein said part of the subject's cardiovascular system is an artery of the subject.

9. The method according to Claim 1, wherein said part of the subject's cardiovascular system is the heart of the subject.

10. The method according to Claim 1, wherein said pulsations of a part of the subject's cardiovascular system are converted into electrical energy by utilizing said pulsations to drive a piezoelectric device to generate an electrical voltage.

11. Apparatus for generating electrical energy from a subject's body, comprising: a transducer for sensing pulsations of a part of the subject's cardiovascular system and for converting said pulsations into electrical energy.

12. The apparatus according to Claim 1, wherein said transducer includes a liquid chamber, an electrical coil electromagnetically linked to the liquid in said chamber, and a pumping element mechanically coupled to said part of the subject's cardiovascular system so as to be driven by said pulsations thereof to pump said liquid through said chamber and to generate thereby an electrical voltage in said electrical coil.

13. The apparatus according to Claim 11, wherein said liquid is a magnetic liquid.

14. The apparatus according to Claim 11, wherein said liquid chamber is of a closed-loop configuration and is enclosed by said electrical coil.

15. The apparatus according to Claim 14, wherein said liquid chamber is of an annular configuration.

16. The apparatus according to Claim 15, wherein said annular liquid chamber is defined by an outer, circular, stiff wall, and an inner, circular, flexible wall, mechanically

coupled to said part of the subject's cardiovascular system by one or more loops encircling both said part of the subject's cardiovascular system and said inner, circular, flexible wall.

17. The apparatus according to Claim 16, wherein said annular chamber includes one or more one-way valves which permit liquid flow only in one direction around said annular chamber.

18. The apparatus according to Claim 11, wherein said transducer is constructed and dimensioned to sense pulsations of an artery of the subject, and to convert such pulsations into electrical energy.

19. The apparatus according to Claim 11, wherein said transducer is constructed and dimensioned to sense pulsations of the subject's heart and to convert such pulsations into electrical energy.

20. The apparatus according to Claim 11, wherein said transducer is a piezoelectric device.